WEST

| Help | Logout | Interrupt |

| Main Menu | Search Form | Posting Counts | Show S Numbers | Edit S Numbers | Preferences |

Search Results -

Terms	Documents
l1 and discrepancy	6

Database:

```
US Patents Full-Text Database
US Pre-Grant Publication Full-Text Database
JPO Abstracts Database
EPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins
```

Refine Search: `l1 and discrepancy`   Clear

Search History

Today's Date: 4/4/2001

DB Name	Query	Hit Count	Set Name
USPT	l1 and discrepancy	6	L8
USPT	l1 and discrepancy	6	L7
USPT	l1 and l5	0	L6
USPT	l4 and discrepancy	4	L5
USPT	l2 and l3	57	L4
USPT	estimated adj1 data	677	L3
USPT	actual adj1 data	8775	L2
USPT	process adj2 reconciling	24	L1

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| Main Menu | Search Form | Posting Counts | Show S Numbers | Edit S Numbers | Preferences |

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Terms	Documents
l1 and discrepancy	6

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US Patents Full-Text Database
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Derwent World Patents Index
IBM Technical Disclosure Bulletins

| Refine Search: | l1 and discrepancy | Clear |

Search History

Today's Date: 4/4/2001

DB Name	Query	Hit Count	Set Name
USPT	l1 and discrepancy	6	L8
USPT	l1 and discrepancy	6	L7
USPT	l1 and l5	0	L6
USPT	l4 and discrepancy	4	L5
USPT	l2 and l3	57	L4
USPT	estimated adj1 data	677	L3
USPT	actual adj1 data	8775	L2
USPT	process adj2 reconciling	24	L1

WEST

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| Main Menu | Search Form | Posting Counts | Show S Numbers | Edit S Numbers | Preferences |

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Terms	Documents
l1 and discrepancy	6

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US Patents Full-Text Database
US Pre-Grant Publication Full-Text Database
JPO Abstracts Database
EPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins
```

Refine Search:

```
l1 and discrepancy
```

Clear

Search History

Today's Date: 4/4/2001

DB Name	Query	Hit Count	Set Name
USPT	l1 and discrepancy	6	L7
USPT	l1 and l5	0	L6
USPT	l4 and discrepancy	4	L5
USPT	l2 and l3	57	L4
USPT	estimated adj1 data	677	L3
USPT	actual adj1 data	8775	L2
USPT	process adj2 reconciling	24	L1

WEST

| Help | Logout | Interrupt |

| Main Menu | Search Form | Posting Counts | Show S Numbers | Edit S Numbers | Preferences |

Search Results -

Terms	Documents
l1 and discrepancy	6

Database:

US Patents Full-Text Database
US Pre-Grant Publication Full-Text Database
JPO Abstracts Database
EPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

| Refine Search: | l1 and discrepancy | Clear |

Search History

Today's Date: 4/4/2001

DB Name	Query	Hit Count	Set Name
USPT	l1 and discrepancy	6	L7
USPT	l1 and l5	0	L6
USPT	l4 and discrepancy	4	L5
USPT	l2 and l3	57	L4
USPT	estimated adj1 data	677	L3
USPT	actual adj1 data	8775	L2
USPT	process adj2 reconciling	24	L1

WEST

Generate Collection

Search Results - Record(s) 1 through 6 of 6 returned.

☐ 1. Document ID: US 5832225 A

L8: Entry 1 of 6   File: USPT   Nov 3, 1998

US-PAT-NO: 5832225
DOCUMENT-IDENTIFIER: US 5832225 A
TITLE: Method computer program product and system for
maintaining replication topology information

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw Desc	Image

☐ 2. Document ID: US 5783808 A

L8: Entry 2 of 6   File: USPT   Jul 21, 1998

US-PAT-NO: 5783808
DOCUMENT-IDENTIFIER: US 5783808 A
TITLE: Electronic check presentment system having
transaction level reconciliation capability

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw Desc	Image

☐ 3. Document ID: US 5691524 A

L8: Entry 3 of 6   File: USPT   Nov 25, 1997

US-PAT-NO: 5691524
DOCUMENT-IDENTIFIER: US 5691524 A
TITLE: Electronic check presentment system having a non-ECP
exceptions notification system incorporated therein

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWIC	Draw Desc	Image

☐ 4. Document ID: US 5532464 A

L8: Entry 4 of 6   File: USPT   Jul 2, 1996

US-PAT-NO: 5532464
DOCUMENT-IDENTIFIER: US 5532464 A
TITLE: Electronic check presentment system having a return
item notification system incorporated therein

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |

☐ 5.   Document ID: US 5412190 A

L8: Entry 5 of 6   File: USPT   May 2, 1995

US-PAT-NO: 5412190
DOCUMENT-IDENTIFIER: US 5412190 A
TITLE: Electronic check presentment system having a return
item notification system incorporated therein

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |

☐ 6.   Document ID: US 5134564 A

L8: Entry 6 of 6   File: USPT   Jul 28, 1992

US-PAT-NO: 5134564
DOCUMENT-IDENTIFIER: US 5134564 A
TITLE: Computer aided reconfiliation method and apparatus

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |

Generate Collection

Terms	Documents
l1 and discrepancy	6

Display | 20 | Documents, starting with Document: | 6 |

Display Format: | TI | Change Format

WEST

☐ | Generate Collection |

L8: Entry 1 of 6   File: USPT   Nov 3, 1998

DOCUMENT-IDENTIFIER: US 5832225 A
TITLE: Method computer program product and system for
maintaining replication topology information

DEPR:
It is one purpose of the knowledge consistency checker to
rectify any discrepancies as servers are added and deleted
throughout the system or new naming contexts are replicated
onto a given server. Furthermore, the knowledge consistency
checker will ensure that each server on the site will be in one
list or the other and that a server does not exist
simultaneously on both lists.

DEPR:
Box 237 encompasses the process steps of reconciling the
intrasite replication information. For this exemplary
embodiment, the replication information is stored directly
within the root object of each naming context. Other
implementations may store such intrasite replication
information in other ways using other structures and those
skilled in the art will undoubtedly see a variety of
possibilities. The purpose of reconciling the intrasite
replication information is for allowing the replication
mechanism to efficiently and correctly replicate all naming
contexts across a given site.

WEST

☐ [Generate Collection]

L8: Entry 1 of 6   File: USPT   Nov 3, 1998

US-PAT-NO: 5832225
DOCUMENT-IDENTIFIER: US 5832225 A

TITLE: Method computer program product and system for maintaining replication topology information

DATE-ISSUED: November 3, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Hacherl; Donald Joseph	North Bend	WA	N/A	N/A
Freeman; John	Redmond	WA	N/A	N/A

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Microsoft Corporation	Redmond	WA	N/A	N/A	02

APPL-NO: 8/ 678887
DATE FILED: July 12, 1996

INT-CL: [6] G06F 13/00
US-CL-ISSUED: 395/200.53; 707/200
US-CL-CURRENT: 709/223; 707/200
FIELD-OF-SEARCH: 707/1, 707/201, 707/10, 707/101, 707/200, 707/104, 711/141, 395/831, 395/200.53

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

[Search Selected] [Search ALL]

WEST

☐ | Generate Collection |

L8: Entry 1 of 6   File: USPT   Nov 3, 1998

US-PAT-NO: 5832225
DOCUMENT-IDENTIFIER: US 5832225 A

TITLE: Method computer program product and system for
maintaining replication topology information

DATE-ISSUED: November 3, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Hacherl; Donald Joseph	North Bend	WA	N/A	N/A
Freeman; John	Redmond	WA	N/A	N/A

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Microsoft Corporation	Redmond	WA	N/A	N/A	02

APPL-NO: 8/ 678887
DATE FILED: July 12, 1996

INT-CL: [6] G06F 13/00
US-CL-ISSUED: 395/200.53; 707/200
US-CL-CURRENT: 709/223; 707/200
FIELD-OF-SEARCH: 707/1, 707/201, 707/10, 707/101, 707/200,
707/104, 711/141, 395/831, 395/200.53

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

| Search Selected | | Search ALL |

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
5434994	July 1995	Shaheen et al.	707/201
5586310	December 1996	Sharman	707/10
5588147	December 1996	Neeman et al.	707/1
5594921	January 1997	Pettus	395/831
5613079	March 1997	Debique et al.	711/141
5617568	April 1997	Ault et al.	707/101
5675787	October 1997	Miller et al.	707/104
5689700	November 1997	Miller et al.	707/10
5692180	November 1997	Lee	707/10

ART-UNIT: 276
PRIMARY-EXAMINER: Luu; Le Hein
ATTY-AGENT-FIRM: Workman, Nydegger, Seeley

ABSTRACT:

An automated method of maintaining replication topology
information is presented that allows system maintenance to
occur with a minimum of system administrator intervention. For
a replicated and distributed database across a network of
computers, the network is divided or partitioned into sites
that are islands of good network connectivity wherein
communication between the site computers occurs using high
bandwidth, low-latency remote procedure calls (RPCs). Further,
intersite connections allow communication between servers of
different sites using a low bandwidth, high-latency store and
forward messaging scheme. Knowledge consistency checkers
running independently on each individual server in the entire
network assures that the servers within a site are
automatically connected in a full-mesh replication topology
within a site and that the sites themselves are connected via a
spanning tree of intersite links. The knowledge consistency
checker enforced replication topology ensures that replication
changes will be transmitted over intersite links as efficiently
as possible so that each change will be transmitted over each
"expensive" intersite link exactly once across a single
direction in order to attain the minimum communication that
must occur in order for all servers to be informed of such a
change. A change arriving at a site replicates according to the
intrasite replication mechanism.

12 Claims, 42 Drawing figures

WEST

☐ | Generate Collection |

L8: Entry 2 of 6   File: USPT   Jul 21, 1998

US-PAT-NO: 5783808
DOCUMENT-IDENTIFIER: US 5783808 A

TITLE: Electronic check presentment system having transaction level reconciliation capability

DATE-ISSUED: July 21, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Josephson; Stanley M.	Dallas	TX	N/A	N/A

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
J. D. Carreker and Associates, Inc.	Dallas	TX	N/A	N/A	02

APPL-NO: 8/ 584890
DATE FILED: January 11, 1996

INT-CL: [6] G06F 17/60
US-CL-ISSUED: 235/379
US-CL-CURRENT: 235/379
FIELD-OF-SEARCH: 235/379, 395/245

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

| Search Selected | | Search ALL |

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
☐ 4264808	April 1981	Owens et al.	235/379
☐ 4270042	May 1981	Case	235/379
☐ 4523330	June 1985	Cain	382/7
☐ 4694397	September 1987	Grant et al.	364/408
☐ 4823264	April 1989	Deming	364/408
☐ 4948174	August 1990	Thomson et al.	283/58
☐ 4974878	December 1990	Josephson	283/67
☐ 5038283	August 1991	Caveney	364/403
☐ 5121945	June 1992	Thomson et al.	283/58
☐ 5237159	August 1993	Stephens et al.	235/379
☐ 5265007	November 1993	Barnhard, Jr. et al.	364/408
☐ 5373550	December 1994	Campbell et al.	379/100
☐ 5412190	May 1995	Josephson et al.	235/379

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	US-CL
164368	October 1982	JPX	364/408
187762	November 1982	JPX	235/379

OTHER PUBLICATIONS

"V Series Item Processing System Tape Input/Output Module",
UNISYS brochure, p. 5.
Sales literature describing product by "StarChek" dated Feb.
17, 1995 entitled Star Check--Advance Notification System, p.
6.
Sales literature entitled "Star Systems, Inc.--Overview" by
StarChek, p. 12.
Sales literature describing StarChek Advance Notification
System dated Jul. 30, 1993, p. 4.
Literature dated Sep. 6, 1993 entitled ". . . While Low Cost
Alternative Gets Test Run with Eight Banks," p.1.
Article dated Friday, May 26, 1995, from the "American Banker"
entitled Star System Sets up Firm to Market Data Base for
Thwarting Check Fraud, by Beth Piskora, p. 1.
Article dated Jul. 1993 from "Checks & Checking" entitled
California Banks Leading Assault on Check Fraud, p. 1.

ART-UNIT: 255
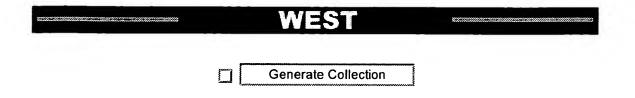PRIMARY-EXAMINER: Evans; F. L.
ATTY-AGENT-FIRM: Hitt Chwang & Gaines, P.C.

ABSTRACT:

Disclosed are an improved electronic check presentment ("ECP")
system having a non-ECP exceptions notification system

incorporated therein and a method of electronically
communicating data pertaining to non-ECP exceptions. The
method, for use by a presenting bank and a payor bank having
check presentment systems between which data related to checks
may be electronically transmitted, comprises the steps of: (1)
electronically transmitting, from the presenting bank to the
payor bank, predetermined presentment information relating to
the checks and permitting a determination by the payor bank as
to which of the checks are properly payable by the payor bank,
(2) comparing records of an exceptions file with records of a
receive control file, the exceptions file capable of containing
records subject to both ECP and non-ECP exceptions to thereby
produce an electronic file of the which of the checks are
properly payable by the payor bank and (3) electronically
transmitting the electronic file to the presenting bank to
thereby provide advance electronic return notification of both
ECP and non-ECP exceptions to checks presented by the
presenting bank to the payor bank.

28 Claims, 19 Drawing figures

WEST

☐ | Generate Collection |

L8: Entry 2 of 6   File: USPT   Jul 21, 1998

DOCUMENT-IDENTIFIER: US 5783808 A
TITLE: Electronic check presentment system having transaction
level reconciliation capability

BSPR:
When the payor bank receives the cash letter, it verifies that
the contents of the cash letter, i.e., the check amounts,
balance with the totals contained on the cover letter. After a
check processing function and posting process, the payor bank
determines whether enough money exists in the payor customer's
account to cover payment of the check and either accepts or
rejects payment of the check. The payor bank then notifies the
presenting bank regarding any balancing discrepancies or any
transactions that are to be returned. The return is
accomplished by physical transportation of the returned check
to the presenting bank that originally accepted the check.

BSPR:
The present invention makes use of the electronic file to
perform a reconciliation process to determine differences
between the information extracted from each of the physical
checks' MICR line and the information contained in the
electronic file for each corresponding check. This comparison
greatly simplifies the manual reconciliation process by
detecting differences that are the result of physical check
handling errors, equipment malfunctions, exception conditions
and other discrepancies inherent in check processing
operations. The automated reconcilement greatly improves the
productivity of the reconcilement function because the
reconciling clerk is able to use the automated difference
report produced during the comparison process to quickly
balance the paper cash letter. Differences such as missing
checks, duplicate checks, extra checks, misread amounts and
other invalid information can be identified on the difference
report, allowing adjustments to be made prior to initiation of
an account update or DDA process.

DEPR:
Referring now to FIG. 6, there is illustrated therein the ECP
process of matching and reconciling the ECP cash letter
transmission file to the paper capture file after completion of
the DDA process. After the first paper pass, the file created
of paper transactions are reconciled with the electronic file
of transactions received the previous day by electronically
matching the two data files in the sort/match process module
601. The purpose of this match is to determine if there were

any ECP transactions that were not present on the paper capture data file 509 and if there were any paper transactions that were not present on the updated ECP strip file 429. If the former were true, reversal transactions would be created and stored in a reversal file 607 to offset the unmatched ECP transaction at the next DDA processing cycle. If the latter condition were true, the physical paper transaction would be selected to be reentered according to the standard check capture method. (See FIG. 7.)

CLPV:
means for electronically generating and storing <u>discrepancies</u> between said electronic cash letters and said complementary paper cash letters identified by the payor bank in response to said reconciliation means.

WEST

☐ | Generate Collection |

L8: Entry 3 of 6   File: USPT   Nov 25, 1997

US-PAT-NO: 5691524
DOCUMENT-IDENTIFIER: US 5691524 A

TITLE: Electronic check presentment system having a non-ECP exceptions notification system incorporated therein

DATE-ISSUED: November 25, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Josephson; Stanley M.	Dallas	TX	N/A	N/A

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
J.D. Carreker and Associates, Inc.	Dallas	TX	N/A	N/A	02

APPL-NO: 8/ 648482
DATE FILED: May 15, 1996

PARENT-CASE:
CROSS-REFERENCE TO RELATED APPLICATION This application is a continuation of Ser. No. 08/236,632, filed Apr. 29, 1994 now abandoned which is a continuation-in-part of application Ser. No. 08/023,364, now U.S. Pat. No. 5,412,190 filed on Feb. 26, 1993, for an "Electronic Check Presentment System Having a Return Item Notification System Incorporated Therein," which was a continuation-in-part of original application Ser. No. 731,529, now U.S. Pat. No. 5,237,159 filed on Jul. 17, 1991 for an "Electronic Check Presentment System."

INT-CL: [6] G06F 17/60, G06F 15/30
US-CL-ISSUED: 235/379; 364/406, 364/408
US-CL-CURRENT: 705/40; 235/375, 705/42
FIELD-OF-SEARCH: 235/379, 364/401, 364/406, 364/408

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

| Search Selected | | Search ALL |

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
☐ 4264808	April 1981	Owens et al.	235/379
☐ 4270042	May 1981	Case	235/379
☐ 4523330	June 1985	Cain	382/7
☐ 4694397	September 1987	Grant et al.	364/408
☐ 4823264	April 1989	Deming	364/408
☐ 4948174	August 1990	Thomson et al.	283/58
☐ 4974878	December 1990	Josephson	283/67
☐ 5038283	August 1991	Caveney	364/403
☐ 5121945	June 1992	Thomson et al.	283/58
☐ 5237159	August 1993	Stephens et al.	235/379
☐ 5265007	November 1993	Barnhard, Jr. et al.	364/408
☐ 5373550	December 1994	Campbell et al.	235/379
☐ 5412190	May 1995	Josephson et al.	235/379

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	US-CL
57-164368	October 1982	JPX	
57-187762	November 1982	JPX	

OTHER PUBLICATIONS

"V Series Item Processing System Tape Input/Output Module",
Unisys brochure, 5 pages.

ART-UNIT: 254
PRIMARY-EXAMINER: Hajec; Donald T.
ASSISTANT-EXAMINER: Rodriguez; Douglas X.
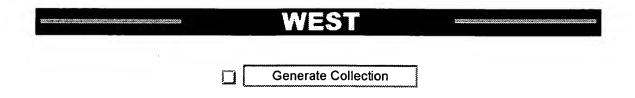ATTY-AGENT-FIRM: Hitt, Chwang & Gaines, P.C.

ABSTRACT:

Disclosed are an improved electronic check presentment ("ECP")
system having a non-ECP exceptions notification system
incorporated therein and a method of electronically
communicating data pertaining to non-ECP exceptions. The
method, for use by a presenting bank and a payor bank having
check presentment systems between which data related to checks
may be electronically transmitted, comprises the steps of: (1)
electronically transmitting, from the presenting bank to the
payor bank, predetermined presentment information relating to
the checks and permitting a determination by the payor bank as
to which of the checks are properly payable by the payor bank,
(2) comparing records of an exceptions file with records of a
receive control file, the exceptions file capable of containing
records subject to both ECP and non-ECP exceptions to thereby
produce an electronic file of the which of the checks are

properly payable by the payor bank and (3) electronically
transmitting the electronic file to the presenting bank to
thereby provide advance electronic return notification of both
ECP and non-ECP exceptions to checks presented by the
presenting bank to the payor bank.

27 Claims, 19 Drawing figures

WEST

☐ | Generate Collection |

L8: Entry 3 of 6   File: USPT   Nov 25, 1997

DOCUMENT-IDENTIFIER: US 5691524 A
TITLE: Electronic check presentment system having a non-ECP
exceptions notification system incorporated therein

BSPR:
When the payor bank receives the cash letter, it verifies that
the contents of the cash letter, i.e., the check amounts,
balance with the totals contained on the cover letter. After a
check processing function and posting process, the payor bank
determines whether enough money exists in the payor customer's
account to cover payment of the check and either accepts or
rejects payment of the check. The payor bank then notifies the
presenting bank regarding any balancing discrepancies or any
items that are to be returned. The return is accomplished by
physical transportation of the returned check to the presenting
bank that originally accepted the check.

BSPR:
The present invention makes use of the electronic file to
perform a reconciliation process to determine differences
between the information extracted from each of the physical
checks' MICR line and the information contained in the
electronic file for each corresponding check. This comparison
greatly simplifies the manual reconciliation process by
detecting differences that are the result of physical check
handling errors, equipment malfunctions, exception conditions
and other discrepancies inherent in check processing
operations. The automated reconcilement greatly improves the
productivity of the reconcilement function because the
reconciling clerk is able to use the automated difference
report produced during the comparison process to quickly
balance the paper cash letter. Differences such as missing
checks, duplicate checks, extra checks, misread amounts and
other invalid information can be identified on the difference
report, allowing adjustments to be made prior to initiation of
an account update or DDA process.

DEPR:
Referring now to FIG. 6, there is illustrated therein the ECP
process of matching and reconciling the ECP cash letter
transmission file to the paper capture file after completion of
the DDA process. After the first paper pass, the file created
of paper items are reconciled with the electronic file of items
received the previous day by electronically matching the two
data files in the sort/match process module 601. The purpose of
this match is to determine if there were any ECP items that
were not present on the paper capture data file 509 and if

were not present on the paper capture data file 509 and if
there were any paper items that were not present on the updated
ECP strip file 429. If the former were true, reversal
transactions would be created and stored in a reversal file 607
to offset the unmatched ECP transaction at the next DDA
processing cycle. If the latter condition were true, the
physical paper item would be selected to be reentered according
to the standard check capture method. (See FIG. 7.)

WEST

End of Result Set

☐ | Generate Collection |

L8: Entry 6 of 6   File: USPT   Jul 28, 1992

US-PAT-NO: 5134564
DOCUMENT-IDENTIFIER: US 5134564 A

TITLE: Computer aided reconfiliation method and apparatus

DATE-ISSUED: July 28, 1992

INVENTOR-INFORMATION:
NAME	CITY	STATE	ZIP CODE	COUNTRY
Dunn; Eric C. W.	Palo Alto	CA	94303	N/A
Proulx; Thomas A.	Portola Valley	CA	94025	N/A

APPL-NO: 7/ 424006
DATE FILED: October 19, 1989

INT-CL: [5] G06F 15/30
US-CL-ISSUED: 364/406; 364/401, 364/408
US-CL-CURRENT: 705/33
FIELD-OF-SEARCH: 364/406, 364/401, 364/408, 382/7, 382/3,
382/4, 382/5, 902/4, 902/40

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

| Search Selected | Search ALL |

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
☐ 4047154	September 1977	Vitols et al.	340/146.3E
☐ 4417136	November 1983	Rushby et al.	235/379
☐ 4523330	June 1985	Cain	382/7
☐ 4737911	April 1988	Freeman, Jr.	364/406
☐ 4813077	March 1989	Woods et al.	382/7
☐ 4866611	September 1989	Cree et al.	364/900

ART-UNIT: 236
PRIMARY-EXAMINER: Smith; Jerry
ASSISTANT-EXAMINER: Cass; Russell E.
ABSTRACT:

A method of reconciling a first list (a bank statement) formed
of a first number of first records and a second list (bank
customer's list of records) formed of a second number of second
records where the records affect the account balance for the
bank statement. For each unmatched record in the first list, a
corresponding record from the second list is selected based
upon a match value. Whenever the match value exceeds a
threshold value, the corresponding records from the first and
second lists are paired and thereafter, are removed from
further reconciliation processing. The highest match value
resulting from comparing record elements and other attributes
of records from the first and second lists is determined as a
probable match for reconciliation.

26 Claims, 3 Drawing figures

WEST

End of Result Set

☐ | Generate Collection |

L8: Entry 6 of 6   File: USPT   Jul 28, 1992

DOCUMENT-IDENTIFIER: US 5134564 A
TITLE: Computer aided reconfiliation method and apparatus

BSPR:
To reconcile an account, the customer or other reconcile
typically sorts the records into numerical order and arranges
the cancelled checks and other bank statement records together
with the customer's own accounting information so that they are
all in view. For each transaction record on the bank statement,
the customer visually scans the customer's own accounting
information to identify a matching transaction record.
Typically transactions are visually matched based on amount,
serial number if any, and date range. If a bank transaction is
paired with an identical customer transaction, the customer
marks the paired records and continues to the next record until
all records have been examined. If a close but not perfect
match is found, the customer must determine the reason for the
discrepancy. Then either the bank or the customer must correct
any erroneous or missing information. After all records are
matched and discrepancy noted, the reconciler totals (1) the
amounts of checks listed in the customer records that have not
yet cleared the bank, (2) the customer deposits not entered by
the bank, and (3) bank transactions that the customer has not
entered. The customer then calculates the correct ending
balance as follows: True ending balance equals bank ending
balance plus outstanding deposits or credits minus outstanding
checks or debits. If the calculated ending balance equals the
ending balance in the customer's accounting information,
reconciliation is complete. If the balances do not equal, the
reconciler must search for discrepancies or errors and correct
them until the account is reconciled.

BSPR:
Many banks offer a comparison service to help reconcile
customers' accounts. For such services, each participating
customer provides a copy of the customer's accounting
information to the bank, usually in electronic form such as on
disk, on tape or by computer transmission in a format specified
by the bank. The bank enters the customer accounting
information into the bank's computer. The bank's computer also
contains the bank statement information for the customer. The
bank's computer compares the bank and customer accounting
information to prepare a report for the customer identifying
discrepancies. Typically, the bank makes no effort to reconcile
any discrepancies.

BSPR:
Some banks provide customers with a bank statement in
electronic form. Typically, a customer electronically enters
the data from the electronic bank statement into the customer s
computer and the customer's computer compares the bank data
with the customer's data, but this method offers no assistance
in resolving discrepancies.

BSPR:
For a customer's account which has an average of four thousand
records per month and a 2% difference rate, eighty
non-identical records must be reconciled because of some
discrepancy between the bank listing and the customer listing.
At the time of reconciliation, a customer will normally have
entered records into the customers accounting information for
transactions in the next accounting period so that the
customer's list of records is usually larger than the bank's
list of records and this difference makes the reconciliation
process more difficult.

BSPR:
For example, bank service charges of many different types are
entered by the bank into the bank statement and often this
information is not added to the customer's list of records.
Other transactions which appear on records on a bank list
include credits, reversal of charges, and insufficient funds
transactions. These bank records often lead to discrepancies
between a bank listing of records and a corresponding customer
listing of records.

BSPR:
Other sources of discrepancies between the bank listing and the
customer listing are errors in records that are introduced
either by the bank or by the customer. For example, one common
error is the transposition of digits in either the date element
or in the amount element. Another common type of error is the
omission of a check number. Also, certain records in a bank
listing have no record number. For example, bank service
charges or withdrawals from automatic tellers ATMs) have no
"check" number.

BSPR:
The difficulty of reconciling records having discrepancies due
to errors can become complex and is a function of the number of
records having discrepancies, the number of records in one
listing having no corresponding records in the other listing,
and in the nature of errors causing discrepancies. For example,
if a business tends to write a large number of checks for
similar dollar amounts on similar dates, it is difficult to
correlate visually a record in a bank list with a similar
record (particularly when a difference due to an error or
otherwise exists) in the customer list. Such a correlation is
further compounded if transactions of like or similar dollar
amounts omit a check number for reasons of error or otherwise.

BSPR:

While the above and other methods compare lists of accounting
records to identify <u>discrepancies,</u> none of those methods
adequately assist in reconciliating <u>discrepancies</u>.

BSPR:
The method of determining the match value relies upon assigning
probability values to differences between elements being
compared where the elements for a checking account are
typically the record number for a check, the record date, and
the record amount. Furthermore, different characteristics of
each of the elements are analyzed and any <u>discrepancies</u> in such
characteristics are also assigned probability values.

DEPR:
<u>Processes for reconciling</u> accounts vary depending on the
individual customer. The prerequisites for account
reconciliation are (1) a bank account statement, and (2)
customer accounting information.

DEPR:
The present invention accomplishes the reconciliation process
using a computer. The customer account holder keeps
computerized accounting information and typically receives a
computerized bank account statement from the bank. The customer
accounting information typically incorporates a number of
"drivers", which are programs that read accounting information
from publicly available software packages. Drivers may directly
read accounting data from a particular software package, or
they may indirectly read information that the reconciler has
created via a function of the software used to create the
information. In either case, the customer typically uses the
customer's existing information created over the accounting
period, rather than requiring a re-keying of each transaction,
or the customer uses data extracted from existing accounting
information by means of basic export functions rather than
requiring new programming to make the data usable. Once both
the customer's and the bank's information, are loaded into the
computer, the reconciliation process commences. If
<u>discrepancies</u> are found, the process displays a bank statement
record on a screen along with the closest match found. The user
chooses among several potential courses of action to resolve
the <u>discrepancy</u>. When all transactions from the bank statement
have been paired or corrected, the customer may choose to print
reconciliation reports. The customer can change the customer
account information, or contact the bank to change theirs,
depending on which party made errors, if any. Reconciliation is
then complete. This process is repeated whenever a bank
statement is produced, often monthly.

DEPR:
Automating the bank reconciliation process requires bringing
the customer's data and the bank's data together on a computer.
Once the data is available, it must be matched up accurately
and rapidly. To fully automate the matching process, the
software must provide an efficient method for dealing with
<u>discrepancies</u> between the customer's information and the bank's
statement. Frequently, coping with the <u>discrepancies</u> is the

most time-consuming part of reconciling a bank statement. The
present invention provides a deterministic, error-free approach
to reconciling which quickly deals with exactly-matching
records and then handles the non-exactly-matching records in an
efficient manner.

WEST

| Generate Collection |

Search Results - Record(s) 1 through 4 of 4 returned.

☐ 1.   Document ID: US 6085127 A

L5: Entry 1 of 4   File: USPT   Jul 4, 2000

US-PAT-NO: 6085127
DOCUMENT-IDENTIFIER: US 6085127 A
TITLE: Fault tolerant automatic control system utilizing analytic redundancy

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |

☐ 2.   Document ID: US 6063028 A

L5: Entry 2 of 4   File: USPT   May 16, 2000

US-PAT-NO: 6063028
DOCUMENT-IDENTIFIER: US 6063028 A
TITLE: Automated treatment selection method

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |

☐ 3.   Document ID: US 5819188 A

L5: Entry 3 of 4   File: USPT   Oct 6, 1998

US-PAT-NO: 5819188
DOCUMENT-IDENTIFIER: US 5819188 A
TITLE: Fault tolerant automatic control system utilizing analytic redundancy

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |

☐ 4.   Document ID: US 5615119 A

L5: Entry 4 of 4   File: USPT   Mar 25, 1997

US-PAT-NO: 5615119
DOCUMENT-IDENTIFIER: US 5615119 A
TITLE: Fault tolerant automatic control system utilizing
analytic redundancy

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |

<div align="center">Generate Collection</div>

Terms	Documents
4 and discrepancy	4

Display   20 Documents, starting with Document: 4

Display Format: TI   Change Format

WEST

☐ | Generate Collection |

L5: Entry 3 of 4   File: USPT   Oct 6, 1998

US-PAT-NO: 5819188
DOCUMENT-IDENTIFIER: US 5819188 A

TITLE: Fault tolerant automatic control system utilizing
analytic redundancy

DATE-ISSUED: October 6, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Vos; David W.	Boston	MA	N/A	N/A

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Aurora Flight Sciences Corporation	Manassas	VA	N/A	N/A	02

APPL-NO: 8/ 819829
DATE FILED: March 18, 1997

PARENT-CASE:
This application is a continuation of application Ser. No.
08/477,500 filed Jun. 7, 1995 now U.S. Pat. No. 5,615,119.

INT-CL: [6] G06F 165/00
US-CL-ISSUED: 701/4; 701/29, 701/34, 244/194
US-CL-CURRENT: 701/4; 244/194, 701/29, 701/34
FIELD-OF-SEARCH: 701/3, 701/4, 701/29, 701/34, 701/35, 318/563,
318/564, 244/194, 244/75R, 371/67.1

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

| Search Selected | | Search ALL |

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
☐ 4644538	February 1987	Cooper et al.	364/434
☐ 4649484	March 1987	Herzog et al.	364/434
☐ 5274554	December 1993	Takats et al.	364/424.03
☐ 5289377	February 1994	Yokote et al.	364/424.04
☐ 5297052	March 1994	McIntyre et al.	364/434
☐ 5493497	February 1996	Buus	364/434
☐ 5615119	March 1997	Vos	701/4

OTHER PUBLICATIONS

Textbook entitled "Aircraft Dynamics And Automatic Control", chapter 4 entitled Elementary Theory of Nonlinar Feedback For Single-Input Single-Output systems.
Phd Thesis of David voss entitled Nonlinear Control Of An Autonomousm Unicycle Robot: Practical Issues.
A Geometric Approach To The Synthesis Of Failure Detection Filters, by Mohammad-Ali Massoumnia.
"Application OF nonlinear Transformations To Automatic Flight Control" by G. Meyer, R. Su, and L.R. Hunt.
"Global Transformations Of Nonlinear Systems" by L.R. Hunt, et al.
"Detecting Changes In Signals And Systems -A Survey" by Michele Bassaville.
Textbook entitled "Nonlinear Dynamicla Control Systems", chapter 5 entitled State Space Transformation And Feedback.

ART-UNIT: 364
PRIMARY-EXAMINER: Chin; Gary
ATTY-AGENT-FIRM: Fitzpatrick, Cella, Harper & Scinto

ABSTRACT:

Method and apparatus for a fault tolerant automatic control system for a dynamic device having a sensor and a predetermined control algorithm include structure and steps for receiving a status signal from the sensor. Structure and steps are provided for transforming the sensor status signal and a predetermined reference signal into a linear time invariant coordinate system, generating a sensor estimate in the linear time invariant coordinate system based on the transformed sensor status signal and the transformed reference signal, transforming the sensor estimate into a physical coordinate system, detecting an error in the sensor status signal based on a comparison of the transformed sensor estimate and the sensor status signal, and reconfiguring the predetermined control algorithm based on the detected error. Preferably, the apparatus and method are implemented in an aircraft flight control system capable of detecting an aircraft sensor fault and reconfiguring the flight control program such that flight control surface actuators are commanded by ignoring or mitigating the failed sensor.

20 Claims, 8 Drawing figures

WEST

End of Result Set

☐ | Generate Collection |

L5: Entry 4 of 4   File: USPT   Mar 25, 1997

US-PAT-NO: 5615119
DOCUMENT-IDENTIFIER: US 5615119 A

TITLE: Fault tolerant automatic control system utilizing
analytic redundancy

DATE-ISSUED: March 25, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Vos; David W.	Boston	MA	N/A	N/A

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Aurora Flight Sciences Corporation	Manassas	VA	N/A	N/A	02

APPL-NO: 8/ 477500
DATE FILED: June 7, 1995

INT-CL: [6] G06F 165/00
US-CL-ISSUED: 364/424.013; 364/424.34, 244/194
US-CL-CURRENT: 701/4; 244/194, 701/29
FIELD-OF-SEARCH: 364/433, 364/434, 364/424.03, 364/424.04,
364/184, 364/187, 318/563, 318/564, 244/194, 244/75R, 371/7,
371/11.1, 371/67.1

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

| Search Selected | Search ALL |

	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
☐	4644538	February 1987	Cooper et al.	364/434
☐	4649484	March 1987	Herzog et al.	364/434
☐	5274554	December 1993	Takats et al.	364/424.03
☐	5289377	February 1994	Yokote et al.	364/424.04
☐	5297052	March 1994	McIntyre et al.	364/434
☐	5493497	February 1996	Buus	364/434

OTHER PUBLICATIONS

Textbook entitled "Aircraft Dynamics And Automatic Control",
chapter 4 entitled Elementary Theory of Nonlinear Feedback For
Single-Input Single-Output Systems.
"Detecting Changes In Signals And Systems--A Survey" by Michele
Basseville.
Textbook entitled "Nonlinear Dynamic Control Systems" chapter 5
entitled State Space Transformation And Feedback.
Phd Thesis of David Voss entitled "Nonlinear Control Of An
Autonomous Unicycle Robot: Practical Issues".
"A Geometric Approach to the Synthesis Of Failure Detection
Filters", by Mohammad-Ali Massoumnia.
"Application of Nonlinear Transformations To Automatic Flight
Control" by G. Meyer, R. Su, and L. R. Hunt.
"Global Transformations of Nonlinear Systems" by L. R. Hunt et
al.

ART-UNIT: 234
PRIMARY-EXAMINER: Chin; Gary
ATTY-AGENT-FIRM: Fitzpatrick, Cella, Harper & Scinto

ABSTRACT:

Method and apparatus for a fault tolerant automatic control
system for a dynamic device having a sensor and a predetermined
control algorithm include structure and steps for receiving a
status signal from the sensor. Structure and steps are provided
for transforming the sensor status signal and a predetermined
reference signal into a linear time invariant coordinate
system, generating a sensor estimate in the linear time
invariant coordinate system based on the transformed sensor
status signal and the transformed reference signal,
transforming the sensor estimate into a physical coordinate
system, detecting an error in the sensor status signal based on
a comparison of the transformed sensor estimate and the sensor
status signal, and reconfiguring the predetermined control
algorithm based on the detected error. Preferably, the
apparatus and method are implemented in an aircraft flight
control system capable of detecting an aircraft sensor fault
and reconfiguring the flight control program such that flight
control surface actuators are commanded by ignoring or
mitigating the failed sensor.

20 Claims, 8 Drawing figures

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End of Result Set

☐ [Generate Collection]

L5: Entry 4 of 4   File: USPT   Mar 25, 1997

US-PAT-NO: 5615119
DOCUMENT-IDENTIFIER: US 5615119 A

TITLE: Fault tolerant automatic control system utilizing analytic redundancy

DATE-ISSUED: March 25, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Vos; David W.	Boston	MA	N/A	N/A

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Aurora Flight Sciences Corporation	Manassas	VA	N/A	N/A	02

APPL-NO: 8/ 477500
DATE FILED: June 7, 1995

INT-CL: [6] G06F 165/00
US-CL-ISSUED: 364/424.013; 364/424.34, 244/194
US-CL-CURRENT: 701/4; 244/194, 701/29
FIELD-OF-SEARCH: 364/433, 364/434, 364/424.03, 364/424.04, 364/184, 364/187, 318/563, 318/564, 244/194, 244/75R, 371/7, 371/11.1, 371/67.1

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

[Search Selected] [Search ALL]

	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
☐	4644538	February 1987	Cooper et al.	364/434
☐	4649484	March 1987	Herzog et al.	364/434
☐	5274554	December 1993	Takats et al.	364/424.03
☐	5289377	February 1994	Yokote et al.	364/424.04
☐	5297052	March 1994	McIntyre et al.	364/434
☐	5493497	February 1996	Buus	364/434

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chapter 4 entitled Elementary Theory of Nonlinear Feedback For
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"Detecting Changes In Signals And Systems--A Survey" by Michele
Basseville.
Textbook entitled "Nonlinear Dynamic Control Systems" chapter 5
entitled State Space Transformation And Feedback.
Phd Thesis of David Voss entitled "Nonlinear Control Of An
Autonomous Unicycle Robot: Practical Issues".
"A Geometric Approach to the Synthesis Of Failure Detection
Filters", by Mohammad-Ali Massoumnia.
"Application of Nonlinear Transformations To Automatic Flight
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"Global Transformations of Nonlinear Systems" by L. R. Hunt et
al.

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status signal and the transformed reference signal,
transforming the sensor estimate into a physical coordinate
system, detecting an error in the sensor status signal based on
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status signal, and reconfiguring the predetermined control
algorithm based on the detected error. Preferably, the
apparatus and method are implemented in an aircraft flight
control system capable of detecting an aircraft sensor fault
and reconfiguring the flight control program such that flight
control surface actuators are commanded by ignoring or
mitigating the failed sensor.

20 Claims, 8 Drawing figures

WEST

[Generate Collection]

Search Results - Record(s) 1 through 20 of 24 returned.

☐ 1.   Document ID: US 6160874 A

L1: Entry 1 of 24   File: USPT   Dec 12, 2000

US-PAT-NO: 6160874
DOCUMENT-IDENTIFIER: US 6160874 A
TITLE: Validation gateway

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |

☐ 2.   Document ID: US 6098079 A

L1: Entry 2 of 24   File: USPT   Aug 1, 2000

US-PAT-NO: 6098079
DOCUMENT-IDENTIFIER: US 6098079 A
TITLE: File version reconciliation using hash codes

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |

☐ 3.   Document ID: US 6091422 A

L1: Entry 3 of 24   File: USPT   Jul 18, 2000

US-PAT-NO: 6091422
DOCUMENT-IDENTIFIER: US 6091422 A
TITLE: System for editing complex visual data providing a
continuously updated rendering

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |

☐ 4.   Document ID: US 6076067 A

L1: Entry 4 of 24   File: USPT   Jun 13, 2000

US-PAT-NO: 6076067
DOCUMENT-IDENTIFIER: US 6076067 A
TITLE: System and method for incorporating origination and
destination effects into a vehicle assignment process

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |

☐ 5. Document ID: US 5987506 A

L1: Entry 5 of 24   File: USPT   Nov 16, 1999

US-PAT-NO: 5987506
DOCUMENT-IDENTIFIER: US 5987506 A
TITLE: Remote access and geographically distributed
computers in a globally addressable storage environment

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |

☐ 6. Document ID: US 5870764 A

L1: Entry 6 of 24   File: USPT   Feb 9, 1999

US-PAT-NO: 5870764
DOCUMENT-IDENTIFIER: US 5870764 A
TITLE: Method of managing a data structure for concurrent
serial and parallel revision of a work

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |

☐ 7. Document ID: US 5857207 A

L1: Entry 7 of 24   File: USPT   Jan 5, 1999

US-PAT-NO: 5857207
DOCUMENT-IDENTIFIER: US 5857207 A
TITLE: Storage manager for computer system

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |

☐ 8. Document ID: US 5855005 A

L1: Entry 8 of 24   File: USPT   Dec 29, 1998

US-PAT-NO: 5855005
DOCUMENT-IDENTIFIER: US 5855005 A
TITLE: System for electronically auditing exposures used for
determining insurance premiums

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |

☐ 9. Document ID: US 5832225 A

L1: Entry 9 of 24   File: USPT   Nov 3, 1998

US-PAT-NO: 5832225
DOCUMENT-IDENTIFIER: US 5832225 A
TITLE: Method computer program product and system for
maintaining replication topology information

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |

☐ 10. Document ID: US 5799321 A

L1: Entry 10 of 24   File: USPT   Aug 25, 1998

US-PAT-NO: 5799321
DOCUMENT-IDENTIFIER: US 5799321 A
TITLE: Replicating deletion information using sets of
deleted record IDs

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |

☐ 11. Document ID: US 5783808 A

L1: Entry 11 of 24   File: USPT   Jul 21, 1998

US-PAT-NO: 5783808
DOCUMENT-IDENTIFIER: US 5783808 A
TITLE: Electronic check presentment system having
transaction level reconciliation capability

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |

☐ 12. Document ID: US 5758347 A

L1: Entry 12 of 24   File: USPT   May 26, 1998

US-PAT-NO: 5758347
DOCUMENT-IDENTIFIER: US 5758347 A
TITLE: Layered storage structure for computer data storage
manager

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |

☐   13.   Document ID: US 5691524 A

L1: Entry 13 of 24   File: USPT   Nov 25, 1997

US-PAT-NO: 5691524
DOCUMENT-IDENTIFIER: US 5691524 A
TITLE: Electronic check presentment system having a non-ECP exceptions notification system incorporated therein

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |

☐   14.   Document ID: US 5619695 A

L1: Entry 14 of 24   File: USPT   Apr 8, 1997

US-PAT-NO: 5619695
DOCUMENT-IDENTIFIER: US 5619695 A
TITLE: Method and apparatus for scheduling resources

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |

☐   15.   Document ID: US 5532464 A

L1: Entry 15 of 24   File: USPT   Jul 2, 1996

US-PAT-NO: 5532464
DOCUMENT-IDENTIFIER: US 5532464 A
TITLE: Electronic check presentment system having a return item notification system incorporated therein

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |

☐   16.   Document ID: US 5527003 A

L1: Entry 16 of 24   File: USPT   Jun 18, 1996

US-PAT-NO: 5527003
DOCUMENT-IDENTIFIER: US 5527003 A
TITLE: Method for in-field updating of the gyro thermal calibration of an intertial navigation system

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |

☐   17.   Document ID: US 5500322 A

L1: Entry 17 of 24   File: USPT   Mar 19, 1996

US-PAT-NO: 5500322
DOCUMENT-IDENTIFIER: US 5500322 A
TITLE: Developer additive, toner and developer composition

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |

☐   18.   Document ID: US 5412190 A

L1: Entry 18 of 24   File: USPT   May 2, 1995

US-PAT-NO: 5412190
DOCUMENT-IDENTIFIER: US 5412190 A
TITLE: Electronic check presentment system having a return
item notification system incorporated therein

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |

☐   19.   Document ID: US 5372386 A

L1: Entry 19 of 24   File: USPT   Dec 13, 1994

US-PAT-NO: 5372386
DOCUMENT-IDENTIFIER: US 5372386 A
TITLE: Automated reconciliation system

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |

☐   20.   Document ID: US 5354098 A

L1: Entry 20 of 24   File: USPT   Oct 11, 1994

US-PAT-NO: 5354098
DOCUMENT-IDENTIFIER: US 5354098 A
TITLE: Automated reconciliation system

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |

Generate Collection

Terms	Documents
process adj2 reconciling	24

Display [   ] Documents, starting with Document: [   ]

Display Format: [   ]   Change Format

WEST

☐ | Generate Collection |

L1: Entry 18 of 24   File: USPT   May 2, 1995

US-PAT-NO: 5412190
DOCUMENT-IDENTIFIER: US 5412190 A

TITLE: Electronic check presentment system having a return item notification system incorporated therein

DATE-ISSUED: May 2, 1995

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Josephson; Stanley M.	Dallas	TX	N/A	N/A
Kopesec; Michael F.	Grapevine	TX	N/A	N/A
Royal; P. Darrell	Dallas	TX	N/A	N/A
Stephens; Thomas S.	Addison	TX	N/A	N/A
Thompson; Mitchell D.	Dallas	TX	N/A	N/A

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
J. D. Carreker & Associates, Inc.	Dallas	TX	N/A	N/A	02

DISCLAIMER DATE: 20100819

APPL-NO: 8/ 023364
DATE FILED: February 26, 1993

PARENT-CASE:
CROSS-REFERENCE TO RELATED APPLICATION This application is a continuation in part of application Ser. No. 731,529, filed on Jul. 17, 1991 for "Electronic Check Presentment System" now U.S. Pat. No. 5,237,159.

INT-CL: [6] G06F 15/30
US-CL-ISSUED: 235/379; 364/406, 364/408
US-CL-CURRENT: 705/45; 235/379
FIELD-OF-SEARCH: 235/379, 364/401, 364/406, 364/408

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

| Search Selected | | Search ALL |

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
☐ 4823264	April 1989	Deming	364/408
☐ 4948174	August 1990	Thomson et al.	283/58
☐ 4974878	December 1990	Josephson	283/67
☐ 5121945	June 1992	Thomson et al.	283/58
☐ 5237159	August 1993	Stephens et al.	235/379
☐ 5265007	November 1993	Barnhard, Jr. et al.	235/379

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	US-CL
187762	November 1982	JPX	235/379

ART-UNIT: 254
PRIMARY-EXAMINER: Shepperd; John
ATTY-AGENT-FIRM: Konneker Bush Hitt & Chwang

ABSTRACT:

An Improved Electronic Check Presentment System Having a Return
Item Notification System Incorporated Therein provides banks
with a fully automated capability to receive early notification
of checks that it previously presented to a payor bank and that
have subsequently been identified by the payor bank as return
checks or unpaid items. Moreover, the Improved Electronic Check
Presentment System allows those banks utilizing it to transmit
return notifications to downstream correspondent banks and
customers. Additionally, the Improved Electronic Check
Presentment System Having a Return Item Notification System
Incorporated Therein provides presenting banks with the
capability to automatically instruct the payor banks' systems
as to the method of handling particular return checks, in
advance of any return or pay/no pay decision by a payor bank,
through the capability to append a selected disposition code to
the electronic information associated with the check, at the
time the check is initially processed by the presenting bank.
As a by-product, the Improved Electronic Check Presentment
System provides presenting banks with the capability to
correlate item sequence numbers assigned to checks by other
banks with different item sequence numbers originally assigned
to these checks by the presenting bank. It also provides the
capability to reconcile paper checks to electronic check
records, even in the event that the paper checks are not in the
same order as the electronic check records.

31 Claims, 17 Drawing figures

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L1: Entry 18 of 24   File: USPT   May 2, 1995

DOCUMENT-IDENTIFIER: US 5412190 A
TITLE: Electronic check presentment system having a return item notification system incorporated therein

DEPR:
Referring now to FIG. 6, there is illustrated therein the ECP process of matching and reconciling the ECP cash letter transmission file to the paper capture file. After the first paper pass, the file created of paper items are reconciled with the electronic file of items received the previous day by electronically matching the two data files in the sort/match process module 601. The purpose of this match is to determine if there were any ECP items that were not present on the paper capture data file 509 and if there were any paper items that were not present on the updated ECP strip file 429. If the former were true, reversal transactions would be created and stored in a reversal file 607 to offset the unmatched ECP transaction. If the latter condition were true, the physical paper item would be selected to be reentered according to the standard check capture method. (See FIG. 7)

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L1: Entry 19 of 24   File: USPT   Dec 13, 1994

US-PAT-NO: 5372386
DOCUMENT-IDENTIFIER: US 5372386 A

TITLE: Automated reconciliation system

DATE-ISSUED: December 13, 1994

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Mills; William B.	No. Attleboro	MA	02760	N/A

APPL-NO: 8/ 195637
DATE FILED: February 15, 1994

PARENT-CASE:
This application is a continuation-in-part of U.S. patent
application Ser. No. 08/157,418 filed on Nov. 26, 1993, now
abandoned.

INT-CL: [5] B42D 15/00
US-CL-ISSUED: 283/67; 283/103, 283/105, 235/385, 340/825.34
US-CL-CURRENT: 283/67; 235/385, 283/103, 283/105, 340/5.4,
340/5.8, 340/5.9
FIELD-OF-SEARCH: 283/67, 283/70, 283/94, 283/100, 283/101,
283/103, 283/105, 283/72, 235/375, 235/385, 235/449, 340/825.34

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

[Search Selected] [Search ALL]

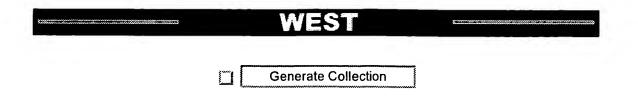|	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
☐	402136	April 1889	Brain	283/103
☐	480423	August 1892	Crowell	283/67
☐	480424	August 1892	Crowell	283/67
☐	607339	July 1898	Burland	283/105
☐	733218	July 1903	Kitsee	283/105
☐	965362	July 1910	Beals	283/100
☐	4816824	March 1989	Katz et al.	340/825.34
☐	4836378	June 1989	Lephardt	206/459.1

ART-UNIT: 324
PRIMARY-EXAMINER: Seidel; Richard K.
ASSISTANT-EXAMINER: Payer; Hwei-Siu
ATTY-AGENT-FIRM: Barlow & Barlow, Ltd.

ABSTRACT:

An automated reconciliation system that permits instantaneous
reconciliation of unsold product units. A pull tab, which
contains hidden reconciliation data is affixed to a product
unit. To reconcile the particular product unit, a vendor
removes the pull tab strip thereby defacing and destroying the
product unit to expose the reconciliation data needed for entry
into a central computer system. Alternatively, concealed
reconciliation data may be printed directly on the product or
its packaging in a fashion which requires the product to be
opened to expose the reconciliation data. Such an opened
condition, with a broken seal or opened wrapping, renders the
product unsaleable. The automated reconciliation system ensures
that unsold product units which receive reconciliation credit
and reimbursement are not fraudulently resold.

44 Claims, 16 Drawing figures

WEST

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L1: Entry 19 of 24   File: USPT   Dec 13, 1994

DOCUMENT-IDENTIFIER: US 5372386 A
TITLE: Automated reconciliation system

DEPR:
At the end of the day, the vendor begins the process for
reconciling unsold newspapers. As seen in FIG. 7, pull tab 10
is drawn in a downward fashion to separate central portion 14
from outer portions 16 and 18 along perforations 20. When
central portion 14 is completely drawn, front page 42 is
completely severed from the remainder of the newspaper,
rendering it unsaleable. Once the central portion 14 of pull
tab 10 has been removed, hidden reconciliation data is exposed,
as seen in FIGS. 8 and 9, by pulling on string 24 to locate the
reconciliation data 22 and to peel away newspaper strip 44
which was glued to pull tab strip 10 and ripped away from the
remainder of the newspaper when the pull tab strip was removed.
As can be seen in FIG. 9, pulling of string 24 releases flap 46
of newspaper material to expose central portion 14 and
reconciliation data thereon.

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L1: Entry 20 of 24   File: USPT   Oct 11, 1994

US-PAT-NO: 5354098
DOCUMENT-IDENTIFIER: US 5354098 A

TITLE: Automated reconciliation system

DATE-ISSUED: October 11, 1994

INVENTOR-INFORMATION:
NAME   CITY   STATE ZIP CODE COUNTRY
Mills; William B.   North Attleboro   MA   02760   N/A

APPL-NO: 8/ 157418
DATE FILED: November 26, 1993

INT-CL: [5] B42D 15/00
US-CL-ISSUED: 283/67; 283/103, 283/105, 235/385
US-CL-CURRENT: 283/67; 235/385, 283/103, 283/105
FIELD-OF-SEARCH: 283/67, 283/70, 283/94, 283/100, 283/101,
283/103, 283/105, 283/72, 235/375, 235/385, 235/449, 340/825.34

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

[Search Selected] [Search ALL]

	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
☐	402136	April 1889	Brain	283/103
☐	480423	August 1892	Crowell	283/67
☐	480424	August 1892	Crowell	283/67
☐	607339	July 1898	Burland	283/105
☐	733218	July 1903	Kitsee	283/105
☐	965362	July 1910	Beals	283/100
☐	4176260	November 1979	Ward et al.	235/385
☐	4816824	March 1989	Katz et al.	340/825.34
☐	4836378	June 1989	Lephardt	206/459

ART-UNIT: 324
PRIMARY-EXAMINER: Seidel; Richard K.
ASSISTANT-EXAMINER: Payer; Hwei-Siu

ATTY-AGENT-FIRM: Barlow & Barlow, Ltd.

ABSTRACT:

An automated reconciliation system that permits instantaneous
reconciliation of unsold publications. A pull tab, which
contains hidden reconciliation data is affixed to a
publication. To reconcile the particular publication, a vendor
removes the pull tab strip thereby defacing the publication to
expose the reconciliation data needed for entry into a central
computer system. The automated reconciliation system ensures
that unsold publications which receive reconciliation credit
and reimbursement are not fraudulently resold.

26 Claims, 12 Drawing figures

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L1: Entry 21 of 24   File: USPT   Jul 28, 1992

US-PAT-NO: 5134564
DOCUMENT-IDENTIFIER: US 5134564 A

TITLE: Computer aided reconfiliation method and apparatus

DATE-ISSUED: July 28, 1992

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Dunn; Eric C. W.	Palo Alto	CA	94303	N/A
Proulx; Thomas A.	Portola Valley	CA	94025	N/A

APPL-NO: 7/ 424006
DATE FILED: October 19, 1989

INT-CL: [5] G06F 15/30
US-CL-ISSUED: 364/406; 364/401, 364/408
US-CL-CURRENT: 705/33
FIELD-OF-SEARCH: 364/406, 364/401, 364/408, 382/7, 382/3, 382/4, 382/5, 902/4, 902/40

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

⌈ Search Selected ⌉ ⌈ Search ALL ⌉

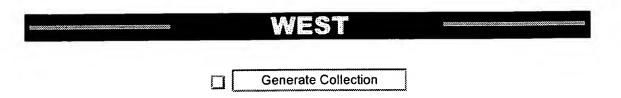|	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
☐	4047154	September 1977	Vitols et al.	340/146.3E
☐	4417136	November 1983	Rushby et al.	235/379
☐	4523330	June 1985	Cain	382/7
☐	4737911	April 1988	Freeman, Jr.	364/406
☐	4813077	March 1989	Woods et al.	382/7
☐	4866611	September 1989	Cree et al.	364/900

ART-UNIT: 236
PRIMARY-EXAMINER: Smith; Jerry
ASSISTANT-EXAMINER: Cass; Russell E.
ABSTRACT:

A method of reconciling a first list (a bank statement) formed

of a first number of first records and a second list (bank customer's list of records) formed of a second number of second records where the records affect the account balance for the bank statement. For each unmatched record in the first list, a corresponding record from the second list is selected based upon a match value. Whenever the match value exceeds a threshold value, the corresponding records from the first and second lists are paired and thereafter, are removed from further reconciliation processing. The highest match value resulting from comparing record elements and other attributes of records from the first and second lists is determined as a probable match for reconciliation.

26 Claims, 3 Drawing figures

WEST

☐ | Generate Collection |

L1: Entry 21 of 24   File: USPT   Jul 28, 1992

DOCUMENT-IDENTIFIER: US 5134564 A
TITLE: Computer aided reconfiliation method and apparatus

DEPR:
Processes for reconciling accounts vary depending on the
individual customer. The prerequisites for account
reconciliation are (1) a bank account statement, and (2)
customer accounting information.

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Search Results - Record(s) 21 through 24 of 24 returned.

☐ 21. Document ID: US 5134564 A

L1: Entry 21 of 24   File: USPT   Jul 28, 1992

US-PAT-NO: 5134564
DOCUMENT-IDENTIFIER: US 5134564 A
TITLE: Computer aided reconfiliation method and apparatus

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |

☐ 22. Document ID: US 4866611 A

L1: Entry 22 of 24   File: USPT   Sep 12, 1989

US-PAT-NO: 4866611
DOCUMENT-IDENTIFIER: US 4866611 A
TITLE: Method for automatically reconciling entries on two
copies of independently maintained electronic calendars

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |

☐ 23. Document ID: US 4779191 A

L1: Entry 23 of 24   File: USPT   Oct 18, 1988

US-PAT-NO: 4779191
DOCUMENT-IDENTIFIER: US 4779191 A
TITLE: Method and apparatus for expanding the address space
of computers

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |

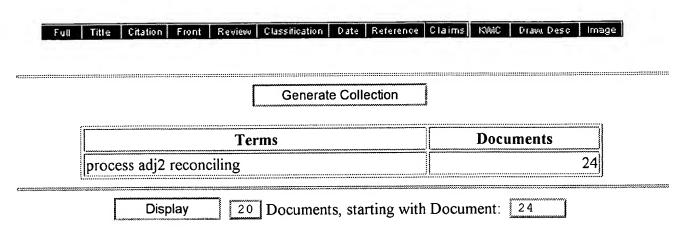☐ 24. Document ID: US 4200495 A

L1: Entry 24 of 24   File: USPT   Apr 29, 1980

US-PAT-NO: 4200495
DOCUMENT-IDENTIFIER: US 4200495 A
TITLE: Prevention of defluidization in the treatment of
caking carbonaceous solids

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image |

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Terms	Documents
process adj2 reconciling	24

Display [20] Documents, starting with Document: [24]

Display Format: [TI] [Change Format]